

WHAT IS CLAIMED IS:

1. (Currently Amended) A system operable to augment tactical (line of sight (LOS)) communications with that integrates commereial satellite communications (SATCOM) technology with tactical aircraft communications technology, comprising:

at least one SATMCOM transceiver operable to perform two-way communications an off-board transeeiver capable of communicating two-way data with a SATCOM service network; an onboard transeeiver capable of communicating two-way data with SATCOM network; a tactical an onboard communications system; and an onboard interface unit operably coupled to the at least one SATCOM transceiver and the tactical communication system, where the interface unit further comprising a computer processor that executes a software program comprising instructions for:

sending and receiving data from the at least one SATCOM onboard commereial transceiver; and

sending and receiving data from the tactical onboard-communications system, and wherein the interface unit allows data to be transferred between the tactical communication system, the at least one SATCOM transceiver, and the SATCOM service. said onboard interface unit communicates data with said onboard communications system and said onboard commereial transceiver.

2. (Currently Amended) The system of claim 1, wherein the at least one SATCOM transceiver comprises said onboard transeeiver is a commercial off-the-shelf transceiver.

3. (Currently Amended) The system of Claim 1, wherein:
the ~~said~~ tactical communications system further comprises an intercom; and
the ~~onboard~~ interface unit further comprises a sound-card operably coupled to the said computer processor and ~~said~~ the intercom, wherein the sound-card is operable to: ~~being capable of:~~

communicate communicating two-way data with said computer processor; and communicate communicating two-way analog-voice data with said intercom.

4. (Currently Amended) The system of Claim 1, wherein ~~the said onboard~~ interface unit comprises a video card coupled to ~~the said~~ processor and ~~the said~~ display, wherein ~~the said~~ video card is is operable to: ~~capable of:~~

~~send sending and receive receiving~~ data from the computer processor;

~~send sending and receive receiving~~ data from the display.

5. (Original) The system of Claim 4, wherein the video card is capable of communicating SVGA data.

6. (Original) The system of Claim 4, wherein the video card is capable of communicating RS-170 data.

7. (Original) The system of Claim 4, wherein the display is a multi-function display set.

8. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein the tactical communications system further comprises a tactical transceiver operably coupled to the interface unit wherein the interface unit allows data to be transferred between the tactical communication system and tactical recipients through the tactical transceiver, ~~radio in electrical connection with the computer processor, the computer processor capable communicating two-way data with the radio.~~

9. (Currently Amended) The system of Claim 8, wherein the tactical transceiver comprises radio ~~is~~ a UHF/VHF radio.

10. (Currently Amended) The system of Claim 8, wherein the ~~commercial~~ interface unit further comprises an improved data modem in electrical connection with the radio and the computer processor, whereby the computer processor communicates two-way data with the radio.

11. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein the communications system further comprises a mission data processor operably coupled to ~~in electrical connection with~~ the computer processor, the mission data processor capable of communicating two-way data with the computer processor.

12. (Currently Amended) The system of Claim 11, wherein the ~~onboard~~ integration unit further comprises a bus in electrical connection with the mission data processor and the computer processor, whereby the computer processor communicates data with the mission data processor.

13. (Original) The system of Claim 12, wherein the bus is a Mil-Std-1553 bus.

14. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein the ~~onboard~~ interface unit further comprises a navigation system operably coupled to ~~in electrical connection with~~ the computer processor and an antenna, wherein the navigation system and the computer processor are capable of communicating two-way data with each other.

15. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein threat data is communicated.

16. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein weather data is communicated.

17. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein target data is communicated.

18. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein voice data is communicated.

19. (Currently Amended) The system ~~to integrate commercial satellite communications technology~~ of Claim 1, wherein ejection data is communicated.

20. (Currently Amended) The system ~~to integrate commercial satellite communication technology~~ of Claim 1, wherein the ~~onboard~~ interface unit further comprises a commercial SATCOM control capable of sending to and receiving control information from the at least one SATCOM ~~onboard commercial~~ transceiver and capable of sending to and receiving control data from the computer processor.

21. (Currently Amended) A method operable to augment tactical (line of sight (LOS)) communications with satellite communications (SATCOM) for integrating commercial ~~satellite communication technology with aircraft communications technology~~ comprising:

sending and receiving two-way communications between a tactical aircraft and at least one commercial SATCOM service with at least one SATCOM transceiver;

sending and receiving two-way communications between a tactical aircraft and at least one tactical communication service with at least one tactical transceiver;

integrating two-way communications received from the at least one commercial SATCOM service with communications received from the at least one tactical communication service; and

presenting the integrated two-way communications with a tactical communication system.

~~communicating two-way data with a commercial SATCOM network from an off-board transeeiver;~~

~~communicating two-way data with the commercial SATCOM network from an onboard commercial transeeiver;~~

~~communicating two-way data with an onboard interface unit;~~

~~communicating two-way data with an onboard communications system; and~~

~~processing two-way data.~~

22. (Currently Amended) The method of Claim 21 wherein a computer processor integrates the two-way communications received from the at least one commercial SATCOM service with communications received from the at least one tactical communication service. ~~for integrating commercial satellite communication technology with aircraft communications technology wherein the step of communicating data to the onboard interface unit further comprises communicating the data to a computer processor.~~

23. (Currently Amended) The method of Claim 21 ~~for integrating commercial satellite communication technology with aircraft communications technology~~ wherein tactical communication comprises a ~~the step of communicating two-way data with the onboard communications system further comprises communicating video data to a~~ multi-function display set.

24. (Currently Amended) The method ~~for integrating commercial satellite communication technology with aircraft communications technology~~ of claim 21, further comprising presenting the integrated two-way communications ~~wherein the step of communicating two-way data with the onboard communications system further comprises communicating video data to a~~ commercial display.

25. (Currently Amended) The method ~~for integrating commercial satellite communication technology with military aircraft communications technology~~ of claim 21, further comprising processing the integrated two-way communications, ~~wherein the step of communicating two-way data with the onboard communications system further comprises communicating two-way data with a mission data processor.~~

26. (Currently Amended) The method ~~for integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the integrated two-way communications comprise voice communications presented ~~the step of communicating two-way data with the onboard communications systems further comprises communicating voice analog data with an intercom.~~

27. (Currently Amended) The method ~~for integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the at least one tactical transceiver comprises a ~~step of communicating two-way data with the onboard communications system further comprises communicating voice data with a radio.~~

28. (Currently Amended) The method ~~for integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise data from ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating data from a mobile ground unit.~~

29. (Currently Amended) The method ~~for integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise data from ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating data from a mobile air unit.~~

30. (Currently Amended) The method ~~for integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise data from ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating data from a stationary ground command.~~

31. (Currently Amended) The method ~~for integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating voice data.~~

32. (Currently Amended) The method for ~~integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating threat data.~~

33. (Currently Amended) The method for ~~integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating weather data.~~

34. (Currently Amended) The method for ~~integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating target data.~~

35. (Currently Amended) The method for ~~integrating commercial satellite communication technology with aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise ~~the step of communicating two-way data with a commercial SATCOM network from an onboard commercial transceiver further comprises communicating status data.~~

36. (Currently Amended) The method for ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 21, wherein the two-way communications between a tactical aircraft and at least one commercial SATCOM service comprise ~~the step of communicating two-way data with a commercial SATCOM network from an off-board transceiver further comprises communicating ejection data.~~

37. (Currently Amended) The method ~~for integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 21, wherein the at least one SATCOM transceiver comprises an onboard commercial transceiver.; ~~the step of communicating two-way data with a commercial SATCOM network from an onboard commercial transceiver further comprises communicating voice data.~~

38. (Currently Amended) The method ~~for integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 21, wherein the at least one SATCOM transceiver comprises ~~the step of communicating two-way data with a commercial SATCOM network from an on board off-the shelf transceiver. further comprises further comprises communicating threat data~~

39. Canceled

40. Canceled

41. (Currently Amended) An apparatus operable to integrate commercial satellite communications (SATCOM) with tactical (line of sight (LOS)) communications ~~of integrating commercial satellite communication technology with military aircraft communications technology~~ comprising;

at least one SATMCOM transceiver operable to perform two-way communications with a SATCOM service;

a tactical communications system;

an interface unit operably coupled to the at least one SATCOM transceiver and the tactical communication system, where the interface unit further comprises:

at least one SATCOM transceiver controller;~~a commercial SATCOM control in electrical connection with a commercial satellite transceiver, the commercial SATCOM control operable to control the at least one SATCOM commercial satellite transceiver;~~

a computer processor operably coupled to the at least one ~~in electrical connection with the commercial SATCOM transceiver, wherein the computer processor is capable of:~~

sending and receiving data from the at least one SATCOM ~~commercial~~ transceiver; and

processing the data; and

a sound card in electrical connection with the computer processor and an intercom, the sound card capable of;

sending and receiving data from the computer processor;

sending and receiving voice analog data from an intercom; and

processing data.



42. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 41, further comprising:

a video card in electrical connection with the computer processor and a display, wherein the video card capable of:

communicating two-way data with the computer processor;
communicating video data with the display;
processing data.

43. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 42, wherein the video card is an SVGA video card.

44. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 42, wherein the video card is an RS-170 video card.

45. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 42, wherein the display is a multi-function display set.

46. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 42, wherein the display is a commercial display.

47. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 41, wherein the computer processor is in electrical connection with a radio, the computer processor is capable of communicating two-way voice data with a radio.

48. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 47, wherein the radio is a UHF/VHF radio.

49. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 47, further comprising an improved data modem in electrical connection with the computer processor and the radio, whereby the computer processor communicates two-way data with the radio.

50. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 41, wherein the computer processor is in electrical connection with a mission data processor, the mission data processor capable of communicating two-way data with the computer processor.

51. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 41, further comprising a bus in electrical connection with the computer processor and the mission data processor, whereby the computer processor communicates with the mission data processor.

52. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 51, wherein the bus is a Mil-Std-1553 bus.

53. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 41, further comprising a navigation system in electrical connection with an antenna and the computer processor, wherein the navigation system is capable of communicating data with the computer processor.

54. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 53, wherein the navigation system is a GPS system.

55. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 41, further comprising a storage device in electrical communication with the computer processor, the computer processor capable of communicating two-way data with the storage device.

56. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 55, wherein the storage device is a flash hard drive.

57. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 41, further comprising a voltage converter in electrical connection with computer processor, the voltage converter capable of providing electrical power to the computer processor.

58. (Currently Amended) The apparatus of ~~integrating commercial satellite communication technology with military aircraft communications technology~~ of Claim 51, further comprising a test port in electrical connection with the computer processor.

59. (Original) The apparatus of Claim 58, wherein the test port is a RS-232 port.

Objections to the Drawings under 37 CFR 1.83(a)

The drawings stand objected to under 37 CFR 1.83(a). In response to this objection, Applicants respectfully submit that a proposed drawing correction and amendment to the specification is submitted to overcome these objections. Therefore, Applicants respectfully request that the Examiner withdraw the objections to the drawings and accept the proposed drawing correction and amendment to the specification. Applicants further submit that no new matter has been added.

Rejections Under 35 USC § 102

Claims 1-4, 7, 8, 10-12, 14, 16, 18, 20-31, 33, 37, 38, 40-42, 45-47, 49, 50, 53-55 stand rejected under 35 USC Section 102(e) as being anticipated by Lemelson, et al. (US Patent No. 6,084,510.) The examiner states with regards to Claims 1, 21, and 41, Lemelson teaches a system that integrates commercial satellite technology with tactical aircraft (Column 16, Lines 34-37) communication technology. The examiner states regarding Claims 1, 21, and 41, Lemelson teaches a system that integrates commercial satellite communication with tactical (line of sight (LOS)) communication technology. The examiner further states that this is described in Lemelson (Col. 16, lines 34-37 and FIGURE 1) wherein emergency response dispatch services include military forces. The examiner further states that two-way satellite communications links 22B and 22E of Figure 1 exemplify this integrated communication system.

Applicants respectfully submit that amended independent claims 1, 21 and 41 more clearly claim a system that augments two-way tactical (LOS) communications with two-way satellite communications. This differs greatly from what is taught in Lemelson. Lemelson fails to teach two-way satellite communications to the end device (warning device 11 or mobile surveillance 12). Lemelson merely teaches that an end device may receive data which the device then prioritizes based on the device's location as determined from one-way communications received from GPS satellites. Lemelson fails to teach that an alternative civilian communication pathway be integrated with or take the place of military communication pathways. The present invention claims that tactical aircraft, such as aircraft 18, augment their tactical LOS communications, such as those provided in theatre by JSTARS, AWACS, E-2C, and other like tactical LOS communication systems, with two-way satellite voice and interactive data services provided by a mobile satellite service either military or civilian. Thus the present invention

allows multiple communication pathways, both military and civilian, for tactical communications that extend beyond the tactical aircrafts current horizon. This allows remote locations, located beyond the line of sight of the tactical aircraft, two-way communications in real time over multiple communication pathways with the tactical aircraft without further congesting the bandwidth of military communication systems. Further, this two-way communication via civilian or commercial satellite communication systems augments two-way line of sight tactical communication beyond the horizon of traditional LOS communications without burdening military satellite communications.

Lemelson fails to teach two-way interactive voice and data communications between satellite and tactical units that is used to supplement tactical LOS communications between the tactical unit and other in theatre units. Therefore the applicant respectfully submits that Lemelson fails to teach the invention of Claims 1, 21 and 41 which provide two-way tactical communications that are augmented by and integrated with satellite communications.

The applicant respectfully submits that the examiner's statement that an off-board transceiver capable of communicating two-way with a SATCOM network differs from amended Claims 1, 21 and 41. Links 22B and 22E of Figure 1 of Lemelson do not directly communicate with the satellite but rather communicate with a ground station in communication with the satellite network. The system and method claimed in Claims 1, 21, and 41 interface a tactical unit's tactical communication system directly to a servicing satellite network, either civilian or military.

The examiner states regarding Claims 2 and 38 Lemelson further teaches the transceiver is a commercial off-the-shelf transceiver. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 2 and 38.

The examiner states regarding Claims 3 and 31 Lemelson further teaches an intercom and sound card. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a

remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 3 and 31.

The examiner states regarding Claims 4, 42, and 36 Lemelson further teaches a video card. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 4, 42, and 36.

The examiner states regarding Claims 7 and 45 Lemelson further teaches a multifunction display set. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 7 and 45.

The examiner states regarding Claims 8, 10-12, 14, 49, 50 and 53 Lemelson further teaches a radio in electrical connection with a computer processor. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 8, 10-12, 14, 49, 50 and 53.

The examiner states regarding Claims 16, 18, 33, 40 and 47 Lemelson further teaches the handling of weather and voice data. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 16, 18, 33, 40 and 47 which provide two-way tactical communications that are augmented by and integrated with satellite communications associated with voice and weather data.

The examiner states regarding Claim 20 Lemelson further teaches a commercial SATCOM controller capable of controlling the commercial transceiver. Applicants respectfully

submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claim 20 which provides two-way tactical communications that are augmented by and integrated with satellite communications and handled by a commercial SATCOM controller.

The examiner states regarding Claim 22 Lemelson further teaches the communicating data between the interface unit and computer processor. Applicants respectfully submit that Lemelson fails to teach two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Additionally, Lemelson fails to teach the integration of two-way data from multiple communication pathways. At most, Lemelson depicts the use of one-way satellite data to prioritize other warning signals. Therefore, Applicant respectfully submit that Lemelson fails to teach the invention of Claim 22 which provides two-way tactical communications that are augmented by and integrated with satellite communications by a computer processor and interface unit.

The examiner states regarding Claims 23 and 24 Lemelson further teaches communicating video data to a multifunction display set. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 23 and 24 which provide two-way tactical communications that are augmented by and integrated with satellite communications and presented as video data with a multifunction display set.

The examiner states regarding Claim 25 Lemelson further teaches the handling of two-way data with a mission data processor. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Additionally, Lemelson fails to teach the integration of two-way data from multiple communication pathways. At most, Lemelson depicts the use of one-way satellite data to prioritize other warning signals. Therefore,

Applicants respectfully submit that Lemelson fails to teach the invention of Claim 25 which provides two-way tactical communications that are augmented by and integrated with satellite communications that is processed by a mission data processor.

The examiner states regarding Claim 26, 27, 28, 29, 30, 37, 54 and 55 Lemelson further teaches the use of a voice intercom, off-board transceiver, GPS data, handling of two-way data with a mission data processor. Applicants respectfully submit that Lemelson fails to teach as stated above two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Additionally, Lemelson fails to teach the integration of two-way data from multiple communication pathways. At most, Lemelson depicts the use of one-way satellite data to prioritize other warning signals. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 26, 27, 28, 29, 30, 37, 54 and 55 which provide two-way tactical communications that are augmented by and integrated with satellite communications.

Claims 2-4, 7, 8, 10-12, 14, 16, 18, 20, 22-31, 33, 37, 38, 40, 42, 45-47, 49, 50, 53-55, as amended, depend from Claims 1, 21, and 42, and are patentably distinct as a further limitations upon Claims 1, 21, and 42. As such, Applicants respectfully request the Examiner withdraw the rejections and allow Claims 2-4, 7, 8, 10-12, 14, 16, 18, 20, 22-31, 33, 37, 38, 40, 42, 45-47, 49, 50, 53-55.

Rejections Under 35 USC § 103

Claims 5, 6, 9, 13, 15, 17, 19, 32, 34, 39, 43, 44, 48, 56 and 57 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,084,510, issued to Lemelson in view of the admitted prior art.

Applicants respectfully point out that in order to combine references for an obviousness rejection, there must be some teaching, suggestion or incentives supporting the combination. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989). The mere fact that the prior art could be modified does not make that modification obvious unless the prior art suggests the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, it is well established that Applicant's disclosure cannot

be used to reconstruct Applicant's invention from individual pieces found in separate, isolated references. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988).

Applicants respectfully submit that there is no motivation, teaching or suggestion to combine Lemelson with the cited prior art. Therefore, the rejection on a combination of these references is inappropriate. Withdrawal of the rejection and allowance of Claims 5, 6, 9, 13, 15, 17, 19, 32, 34, 39, 43, 44, 48, 56 and 57 is respectfully requested.

Applicants further submit that neither Lemelson or the cited prior art alone nor the combination of the two teaches or suggests make obvious the invention recited in the Claims because the Lemelson and the cited prior art references do not teach two-way tactical communications that are augmented by and integrated with satellite communications between a tactical aircraft or other tactical unit and both a local commanding control center and a remote control and command center. Additionally, Lemelson fails to teach the integration of two-way data from these multiple communication pathways. At most, Lemelson depicts the use of one-way satellite data to prioritize other warning signals. Therefore, Applicants respectfully submit that Lemelson fails to teach the invention of Claims 5, 6, 9, 13, 15, 17, 19, 32, 34, 39, 43, 44, 48, 56 and 57 which provide two-way tactical communications that are augmented by and integrated with satellite communications.

In regards to Claims 5, 6, 43 and 44, the Examiner states that Lemelson teaches the system of claims 4 and 42 but does not teach communicating SVGA data or RS-170 data. The applicant respectfully submits that for the reasons stated previously, Lemelson fails to teach claims 4 and 42. Thus, one could not reach the invention of Claims 5, 6, 43 and 44 by combining Lemelson with the cited prior art. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claims 5, 6, 43 and 44.

In regards to Claims 9, 13 and 48, the Examiner states that Lemelson teaches the system as claimed but does not specifically disclose the radio is a UHF/VHF radio or that the bus is a Mil-Std-1553 bus. Applicants respectfully submit that for the reasons stated previously, Lemelson fails to teach claims 9, 13 and 48. Thus, one could not reach the invention of Claims 9, 13 and 48 by combining Lemelson with the cited prior art. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claims 9, 13 and 48.

In regards to Claims 15, 17, 19, 32, 34 and 39, the Examiner states that Lemelson teaches the that weather data is communicated but does not specifically teach that threat data is

communicated. Applicants respectfully submit that for the reasons stated previously, Lemelson fails to teach that weather and threat data is integrated within the tactical unit as done within claims 15, 17, 19, 32, 34 and 39. Thus, one could not reach the invention of Claims 15, 17, 19, 32, 34 and 39 by combining Lemelson with the cited prior art. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claims 15, 17, 19, 32, 34 and 39.

In regards to Claim 56, the Examiner states that Lemelson teaches the integrating commercial satellite communications and military aircraft communications. Applicants respectfully disagree and submit that Lemelson merely teaches that satellite communications can be used to prioritize warnings. This does not integrate communications from multiply communication pathways. Applicants respectfully submit that for the reasons stated previously, Lemelson fails to teach the integrating commercial satellite communications and military aircraft communications. Thus, one could not reach the invention of Claim 56 by combining Lemelson with the cited prior art. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claim 56.

In regards to Claim 57, the Examiner states that Lemelson teaches the integrating commercial satellite communications and military aircraft communications. Applicants respectfully disagree and submit that Lemelson merely teaches that satellite communications can be used to prioritize warnings. This does not integrate communications from multiply communication pathways. Applicants respectfully submit that for the reasons stated previously, Lemelson fails to teach the integrating commercial satellite communications and military aircraft communications. Thus, one could not reach the invention of Claim 57 by combining Lemelson with the cited prior art. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claim 57.

Claim 35 stands rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,084,510, issued to Lemelson in view of U.S. Patent No. 5,410,739, issued to Hart. In regards to Claim 35, the Examiner states that Lemelson teaches communicating two-way data with a commercial SATCOM network from an onboard transceiver, but fails to teach the communication of status data as taught within Hart. Lemelson fails to teach the integration of commercial satellite communications and military satellite and tactical (LOS) communications. The present invention integrates data from communications received from multiple

communication pathways. Applicants respectfully submit that for the reasons stated previously, Lemelson fails to teach the integrating commercial satellite communications and military aircraft communications. Thus, one could not reach the invention of Claim 35 by combining Lemelson with the Hart. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claim 35.

Claim 36 stands rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,084,510, issued to Lemelson in view of U.S. Patent No. 6,114,976, issued to Vian. In regards to Claim 36, the Examiner states that Lemelson teaches communicating two-way data with a commercial SATCOM network from an onboard transceiver, but fails to teach the communication of ejection data as taught within Vian. Applicants respectfully submit that Lemelson fails to teach the integration of commercial satellite communications and military satellite and tactical (LOS) communications. The present invention integrates data from communications received from multiple communication pathways. Applicants respectfully submit that for the reasons stated previously, Lemelson fails to teach the integrating commercial satellite communications and military aircraft communications. Thus, one could not reach the invention of Claim 36 by combining Lemelson with the Vian. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claim 36.

Claims 51, 52, 58 and 59 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,084,510, issued to Lemelson in view of U.S. Patent No. 6,084,510, issued to Frazier. In regards to Claims 51, 52, 58 and 59, the Examiner states that Lemelson teaches a bus coupled to a computer processor, but fails to teach the communication between a mission data processor and a computer processor. Applicants respectfully submit that Lemelson fails to teach the integration of commercial satellite communications and military satellite and tactical (LOS) communications. The present invention integrates data from communications received from multiple communication pathways. Applicants respectfully submit that for the reasons stated previously, Lemelson fails to teach the integrating commercial satellite communications and military aircraft communications. Thus, one could not reach the invention of Claims 51, 52, 58 and 59 by combining Lemelson with the Frazier. Applicants, therefore, respectfully request the Examiner to reconsider and withdraw the rejection to allow Claims 51, 52, 58 and 59.

Claims 5, 6, 9, 13, 15, 17, 19, 32, 34, 35, 36, 39, 43, 44, 48, 51, 52, 56, 57, 58 and 59, as amended, depend from Claims 1, 21 and 41, and are patentably distinct as a further limitations